



# GASTRIC ULCERS IN SOWS IN DENMARK

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### CONCLUSION

The last 5-7 years, preventive measures for lowering the prevalence of gastric ulcers have focused especially on providing sows with large particle feed and roughage (e.g. hay and straw). As a result, the prevalence of sows with severe ulcers has decreased with almost 2/3 (from 25% to 9%). However, there is still a need for a continuing focus on reducing the risk for gastric ulcers in sows to ensure proper animal welfare and productivity.

### Background

Since 2014, the pig industry in Denmark has focused on decreasing the occurrence of gastric ulcers in the Danish sows. The prevalence of severe gastric ulcers was in 2011 approximately 25%. Therefore, the aim has been to decrease the prevalence of especially the severe ulcers, focusing on preventive measures and research related to correct feeding and treatment of gastric ulcers.

### Objective

The objective was to monitor the prevalence of gastric ulcers in slaughtered sows by a mandatory national screening program running from 2017 to 2019.

**TABLE 1** PATHOLOGICAL SCORES BY VISUAL EVALUATION OF STOMACHS COLLECTED AT SLAUGHTER

Description	Score
Normal stomach	0
Keratinization, size < 1 mm	1
Keratinization, size 1-3 mm	2
Keratinization, size > 3 mm	3
Erosion, size < ½ cm	4
Erosion, size > ½ cm	5
Ulceration, size < ½ cm or minor scarring	6
Ulceration, size ½-2 cm or moderate scarring	7
Ulceration, size > 2 cm or major scarring	8
Esophageal stricture, diameter > ½ cm	9
Esophageal stricture, diameter < ½ cm	10

Source: Laboratory for Pig Diseases, SEGES Danish Pig Research Centre

### Materials and Methods

Stomachs were collected from 20 sows from each farm, randomly selected at slaughter in 5 different slaughterhouses. All the stomachs were evaluated pathologically at the Laboratory for Pig Diseases (SEGES Danish Pig Research Centre). Pathological scores for the severity was scored on a scale from 0-10, with 0 being no ulcer and 10 being the highest possible score. Score 8-10 were denoted severe ulcers (Table 1).

### Results

In total, the screening has so far included 14,460 stomachs from 723 different herds, distributed all over Denmark. The size of the herds, from where the stomach originated, had a median of 700 [min 200; max 3,600] sows. Out of the 14,460 stomachs, 2,725 (19%) had no ulcers (score 0) and 1,324 stomachs (9%) had severe ulcers (score 8-10) (Figure 1).

**FIGURE 1** EXAMPLES OF GASTRIC ULCER SCORE 0 AND SCORE 8



Source: Laboratory for Pig Diseases, SEGES Danish Pig Research Centre



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